

A new genus and species of Tanyderidae (Peringueyomyina barnardi) in the South African museum (Diptera)

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3.—*A New Genus and Species of Tanyderidae* (*Péringueomyia barnardi*) *in the South African Museum (Diptera)*.—By CHARLES P. ALEXANDER, Ph.D. (Cornell).

(With 1 Text-figure.)

The family Tanyderidae, including the most primitive of the living crane-flies, has hitherto been represented only by two recent genera with nine species. A new and most interesting genus has been recently discovered in Cape Colony by Mr. Barnard, and is described hereinafter as *Péringueomyia barnardi*, gen. et sp. n. This is the first species of the family to be made known from the Ethiopian region.

The distribution of the ten known species of this palæogenic group of insects may be summarised as follows: The first recent genus to be made known was described in 1859 by Osten Sacken under the name *Protoplasa* for the new species *fitchii* (1859). This fly is found in eastern North America. In 1877 the second species, *P. vipio* (O. S.) (1877), was described from California. In 1918 the third and last described species of the genus, *P. vanduzeei*, Alex. (1918), likewise from California, was made known. In 1865 Philippi erected the second recent genus, *Tanyderus*, for the Chilian species, *pictus*, Philippi (1865). Five species have since been added to this genus, one other (*patagonicus*, Alex., 1913) being Neotropical, the others Australasian, two from New Zealand (*forcipatus*, O. S., 1880, *annuliferus*, Hutton, 1900), and two others from the small islands west of New Guinea (*ornatissimus* (Dol.) 1858, *mirabilis*, de Meij., 1915). In 1880 Osten Sacken gave to this group the subfamily name Tanyderina, and it is this name that has been adopted for the family. Handlirsch (1909) has reviewed our knowledge of the fossil and recent Tanyderidae, erecting supposedly new genera for each of two of the known species of *Tanyderus* (*Radinoderus* for *ornatissimus* (Dol.), *Mischoderus* for *forcipatus*, O. S.) and another (*Protanyderus*) for *Protoplasa vipio* (O. S.). Those generic names are based on very trivial characters that have been further weakened by the subsequent discovery of *Tanyderus patagonicus*, Alex., *T. mirabilis*, de Meij., and *Protoplasa vanduzeei*, Alex., all of which, following the characters adopted by Handlirsch, would constitute additional new groups in the family. Thus almost every species would represent a distinct genus, and the difficulty of distinguishing between these groups would be increased with the addition of forms subsequently to be made known. De

Meijere has pointed out the slight distinctions between the various Handlirschian genera, and the increased difficulty of separating these groups with the accession of new forms. It seems best to recognise but the three recent genera, *Protoplasa*, Osten Sacken, *Tanyderus*, Philippi, and *Péringueyomyina*, gen. n.

The discovery of a species of this family of flies in Africa is of more than usual interest, as it bridges a very important gap in the known distribution of the family. The present insect differs so remarkably from all of the previously described species of the family that it is necessary to erect a new genus to receive it. The name *Péringueyomyina* is proposed, in honour of Dr. Louis A. Péringuey, as an appreciation of the many favours shown the writer in his studies on the Tipuloidea of South Africa. The presence of an elongate rostrum is unique in the family, although long known in the related family Tipulidae, where it occurs in several widely-separated tribes. Nothing is known of the habits of the genotype, *P. barnardi*, but from the structure of the rostrum it seems probable that the insect feeds on the nectar of tubular flowers as in the Tipulid genera, *Geranomyia*, *Toxorhina* and others with conspicuous elongate rostra.

FAM. TANYDERIDAE.

GEN. PÉRINGUEYOMYINA, gen. n.

Rostrum elongate, exceeding the combined head and thorax; rather stout, cylindrical, with the base enlarged, the surface with numerous subappressed hairs bearing the mouth-parts at the apex; maxillary palpi slender, four-segmented, the three basal segments subequal in length, the last segment about a third longer than the penultimate; labial lobes fleshy, transverse. Antennae with apparently only 16 segments, moderately elongated, setaceous; second scapal segment swollen, subglobular; three basal segments of the flagellum stout, the remaining segments gradually elongated, slender, provided with long verticils that are about equal in length to the segments that bear them; in addition to the verticils, the segments possess a rather abundant suberect pubescence. Head narrowed behind. Eyes large, broadly contiguous beneath, narrowly separated by the vertex above; the ommatidia small with short erect hairs between them. Prothorax large and conspicuous, as in the family. Legs with the margin of the hind coxae swollen anteriorly and provided with a row of black setae; tibiae with short spurs. Wings broad, with five radial, three medial and a single anal vein attaining the margin; *m-cu* distinct; anal

angle moderately prominent. Male hypopygium with the pleurites very slender, greatly elongated, gradually narrowed to the tips, each bearing a single very elongate, cylindrical appendage that is provided with a series of about 30 slender spines and numerous erect setae along its inner margin, at the apex with two elongate bristles.

Genotype, *Péringueyomyina barnardi*, sp. n. (Southern Ethiopian region).

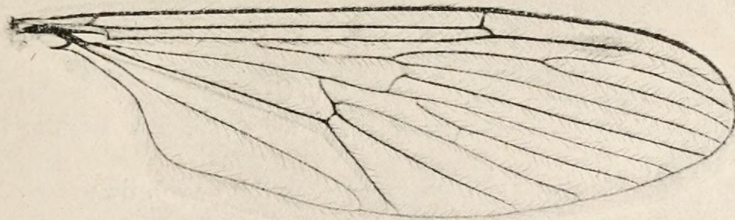
This new group is easily separated from the related genera of the Tanyderidae by the elongate rostrum and by the structure of the antennae and male hypopygium. The genus *Macrochile*, Loew (fossil in Baltic amber), has the rostrum longer than the head, but the large and conspicuous palpi arise from near the middle of its length.

I take great pleasure in dedicating this remarkable genus to Dr. L. A. Péringuey.

PÉRINGUEYOMYINA BARNARDI, sp. n.

Rostrum and antennae black; mesonotum brownish-yellow, the praescutal stripes indistinct; wings yellowish, the stigma small, pale brown; abdomen ringed with brown and yellow.

Male.—Length (excluding rostrum and genitalia) 8·6 mm.; rostrum alone 3·7 mm.; genitalia, pleurite 2 mm.; appendage 2 mm.; wing 10 mm.; greatest width 3 mm.; antenna about 2·3 mm.



Péringueyomyina barnardi, sp. n.

Rostrum, including the mouth-parts, dark brownish-black. Antennae black; in the type only 14 segments are present, but the extreme apex is broken, and the complete organ presumably has either 15 or 16 segments. Head dark.

Pronotum brownish-yellow, passing to almost black on the mid-dorsal region. Mesonotum shiny brownish, with three indistinct darker shiny stripes on the praescutum, the scutal lobes brownish.

Pleura dull yellow, the mesopleura more brownish, darkest, almost purple, near the dorsal portion of the mesepimeron. Legs with the coxae dull yellow; trochanters a little darker; remainder of the legs broken. Halteres pale, the elongate knobs dark brown. Wings with a slight yellowish tinge; stigma small, elongate-oval, pale brown; veins dark brown, with long setae. Venation: Sc_1 ending opposite about two-thirds the length of R_{2+3} ; Rs about three-fourths as long as R_{2+3} , only moderately elongated, unspurred at origin; basal deflection of R_5 arising from R_4 a short distance beyond the forking of the sector; cell 1st M_2 rather small, about as long as Rs , M in direct alignment with M_{1+2} ; deflection of M_{3+4} about one-half longer than $r-m$; m inserted between veins M_2 and M_3 ; $m-cu$ distinct; no indication of the second anal vein.

Abdomen conspicuously ringed with brown and dull yellow, the tergites with the apical third brown, the sternites with the posterior brown margins much narrower. Segments 8 and 9, including the hypopygium, brown. Male hypopygium as described under the generic characterisation.

Habitat.—South Africa.

Holotype, ♂, Oudebosch, Caledon, Cape Colony, altitude 1500 ft., January, 1919 (K. H. Barnard). Type in the South African Museum.

Paratype, ♂ Hottentots-Holland Mountains, Cape Colony, altitude 3000 ft., March, 1919 (K. H. Barnard).

This species is dedicated to the collector, Mr. Keppel H. Barnard.

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